# ⫴ FERRIS STATE UNIVERSITY

# Ferris Graduate Survey Summary 2010-2016[*]

An overview of student satisfaction data

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## Contents

## Abstract

"Assessment is not a spreadsheet; it's a conversation." — Irmeli Halinen

Student satisfaction data from the Ferris post-graduation surveys were compared from the 2010/2011 to 2015/2016 academic years. Over this timespan, the number of student respondents has noticeably improved. The lowest return rate (17%) was obtained in 2010/2011 and the highest (27%) was collected in 2015/2016. The average number of responses was 829 per year for this interval.

## Introduction

## Methods

### Data collection

All registration records for the fall of 2017 were collated and de-identified. The data file, 'registrations.csv', contains only the course name (e.g. BIOL 101), the core competency (e.g. Natural Sciences), and the stan-

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dardized measure (e.g. Selected Response Exam). The datafile is available here.

## Data provenance

Data provenance refers to a system that permits tracking of the origin, movement, modification, and utilization of data sets (Buneman et al., 2001). The provenance of General Education data will be explicitly declared to facilitate the reproducibility and extensibility of these studies.

Location of public website files

All files related to this report can be found online at the Open Science Framework (Nosek, 2012). This site contains all of the files needed to reproduce this report from the de-identified data set. The site's url is https://osf.io/t6u8m/.

Session information

This report was written using RStudio (RStudio Team, 2015) and the R statistical programming language (R Core Team, 2013). These products are free to download for PC, Macintosh, and Linux operating systems. The following information pertains to the session parameters used to generate this report. If you have trouble reproducing this report, it may be due to different session parameters. You may contact Dr. Franklund if you need assistance.

R version 3.4.2 (2017-09-28)

**Platform:** x86_64-apple-darwin15.6.0 (64-bit)

locale: en_US.UTF-8||en_US.UTF-8||en_US.UTF-8||C||en_US.UTF-8||en_US.UTF-8

attached base packages: stats, graphics, grDevices, utils, datasets, methods and base

other attached packages: bindrcpp(v.0.2), pander(v.0.6.1), RColorBrewer(v.1.1-2), ggplot2(v.2.2.1), dplyr(v.0.7.4), plyr(v.1.8.4), tidyr(v.0.7.2) and readr(v.1.1.1)

loaded via a namespace (and not attached): Rcpp(v.0.12.14), rstudioapi(v.0.7), bindr(v.0.1), knitr(v.1.17), magrittr(v.1.5), hms(v.0.4.0), munsell(v.0.4.3), colorspace(v.1.3-2), R6(v.2.2.2), rlang(v.0.1.4), stringr(v.1.2.0), tools(v.3.4.2), grid(v.3.4.2), gtable(v.0.2.0), htmltools(v.0.3.6), lazyeval(v.0.2.1), yaml(v.2.1.14), rprojroot(v.1.2), digest(v.0.6.12), assertthat(v.0.2.0), tibble(v.1.3.4), bookdown(v.0.5), purrr(v.0.2.4), glue(v.1.2.0), evaluate(v.0.10.1), rmarkdown(v.1.8), stringi(v.1.1.6), compiler(v.3.4.2), scales(v.0.5.0), backports(v.1.1.1) and pkgconfig(v.2.0.1)

Processing instructions

This project produced a computationally reproducible assessment report (this document). Anyone wishing to recreate this report from the source document will need to install the following on their computer:

1. An installation of the R programming language
2. An installation of the RStudio IDE
3. An installation of LaTeX

The necessary source files include the de-identified data set (BIOL200Data.csv), Rmarkdown code files (index.Rmd, 01-Introduction.Rmd, 02-Methods.Rmd, 03-Results.Rmd, 04-Discussion.Rmd, and 05-References.Rmd), bibtex reference file (references.bib), and custom art file in the /art folder.

To process the files, you must first open the project in RStudio. Click on the "Build Book" button in the Build menu. Bookdown allows you to build this project as git_book (html site), pdf_book (via LaTeX), or epub_book (compatible with iBooks and other e-book readers).

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## Results and Discussion

The response rates and their overall composition were compared for the six academic years under investigation. Responses to seven of the more quantitative questions (numbers 1, 2, 3, 4, 21, 22, and 23) were also examined. In general, student satisfaction is fairly constant or slightly improving. A more complete examination of each comparision is provided below.

### Response rate by year

Student response rates for the graduation survey have generally been sufficient over the past six years to allow generalizations to be drawn for the entire population of Ferris graduates. Figure 1 shows the total number of alumni responses collected each academic year. The fewest responses, 524, were collected in 2010/2011 (17% response rate). There has been a steady improvement in response rate since that time. The overall average response rate was 829 per year for the interval investigated (approximately a 25% overall return rate).

> Your thoughts? Use the discussion forum below to comment. Is a response rate of under 30% adequate? What should our target reponse rate be for this instrument? What can be done differently to increase our response rate further?

### Response rate by degree earned

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

### Response rate by college

Table 1: Actual distribution of degrees awarded for the past three academic years

| College | 2013-2014 | 2014-2015 | 2015-2016 |
|---------|-----------|-----------|-----------|
| TE | 20.9% | 22.2% | 21.5% |
| PH | 3.7% | 3.3% | 3.5% |
| OP | 1.2% | 1.1% | 1.0% |
| KE | 6.1% | 5.4% | 6.9% |
| HP | 18.3% | 18.3% | 18.1% |
| ED | 18.1% | 17.5% | 15.9% |
| CP | 0.2% | 0.6% | 0.3% |
| BU | 20.9% | 21.5% | 22.6% |

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| College | 2013-2014 | 2014-2015 | 2015-2016 |
|---------|-----------|-----------|-----------|
| AS | 10.5% | 10.0% | 10.2% |

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Overall satisfaction ratings

The overall satisfaction was 90.6%.

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Preparation for employment

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Preparation for continuing education

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Good value for the money

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Recommendation of Ferris/KCAD

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

## Would choose FSU/KCAD again

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?
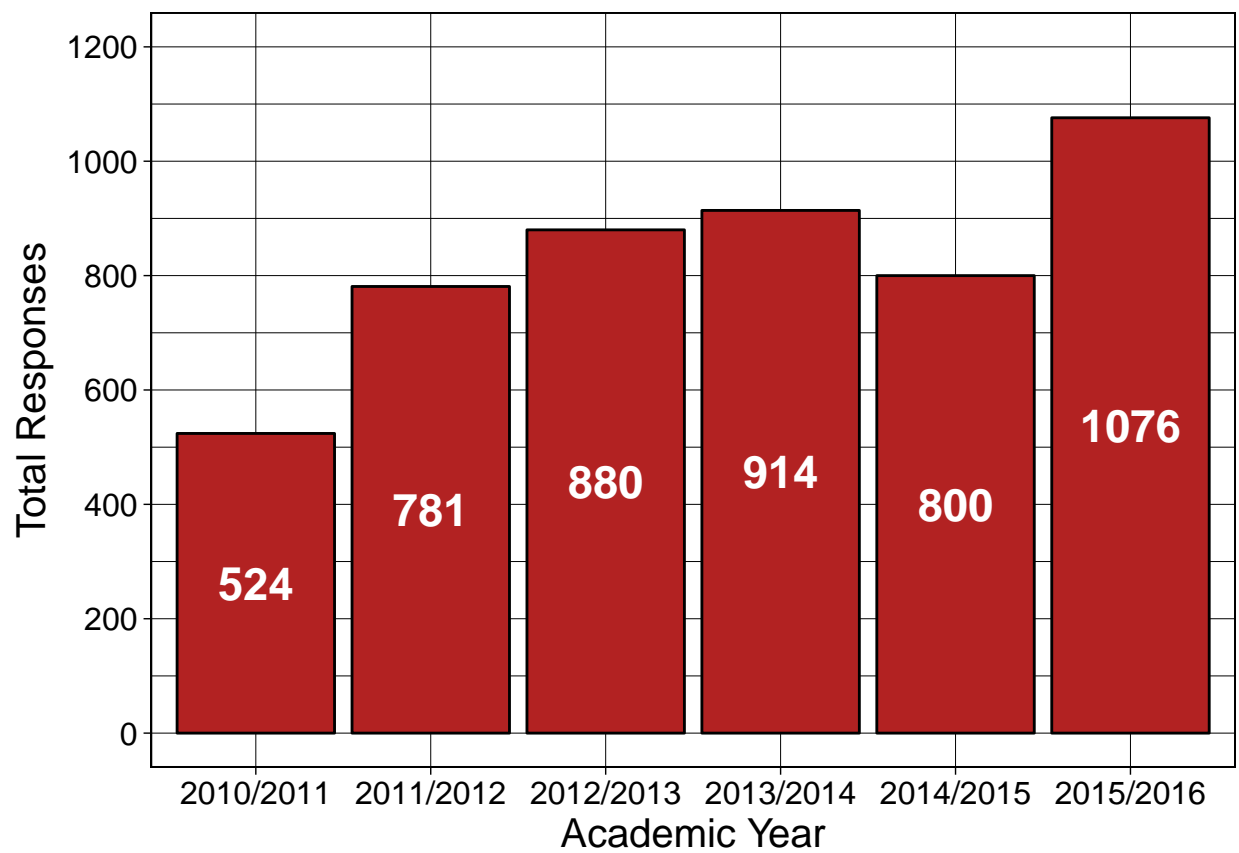
Figure 1: Total number of student survey responses per academic year
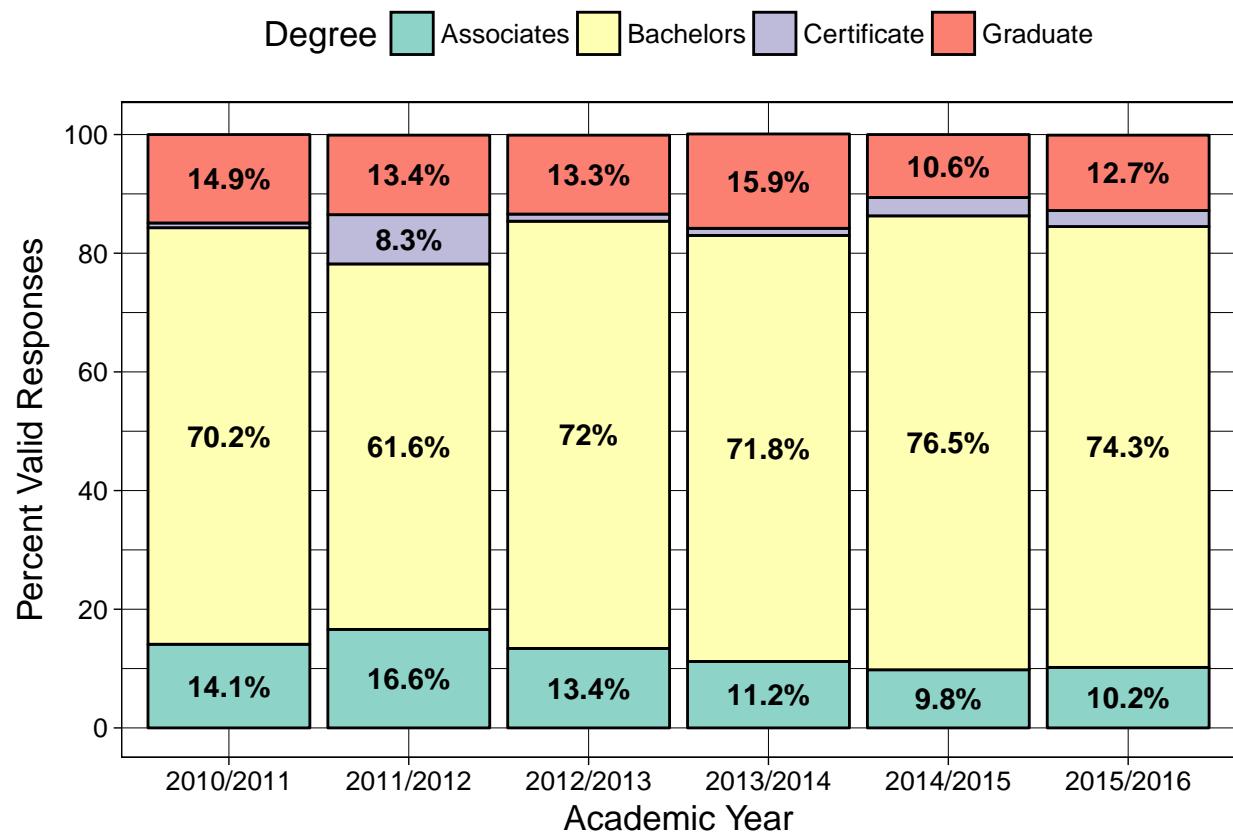
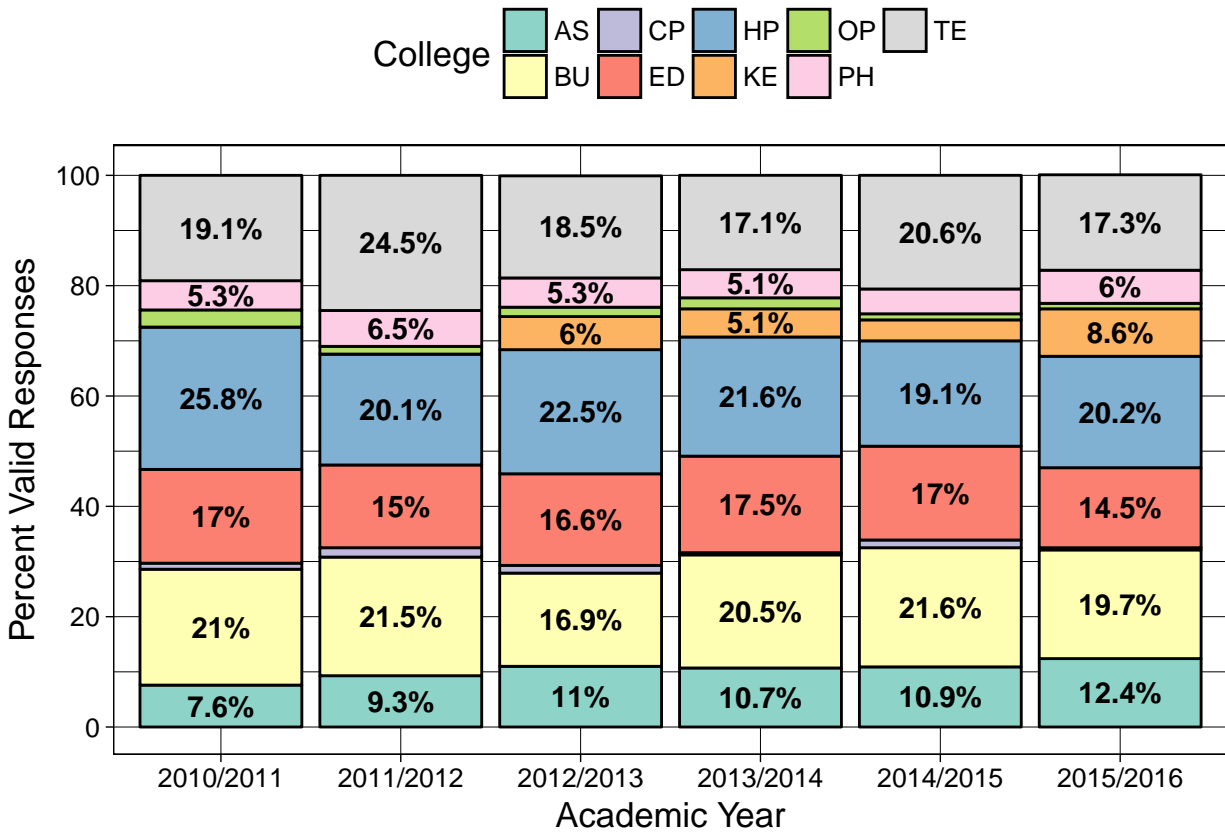Figure 2: Percent of student survey responses by degree earned per academic year

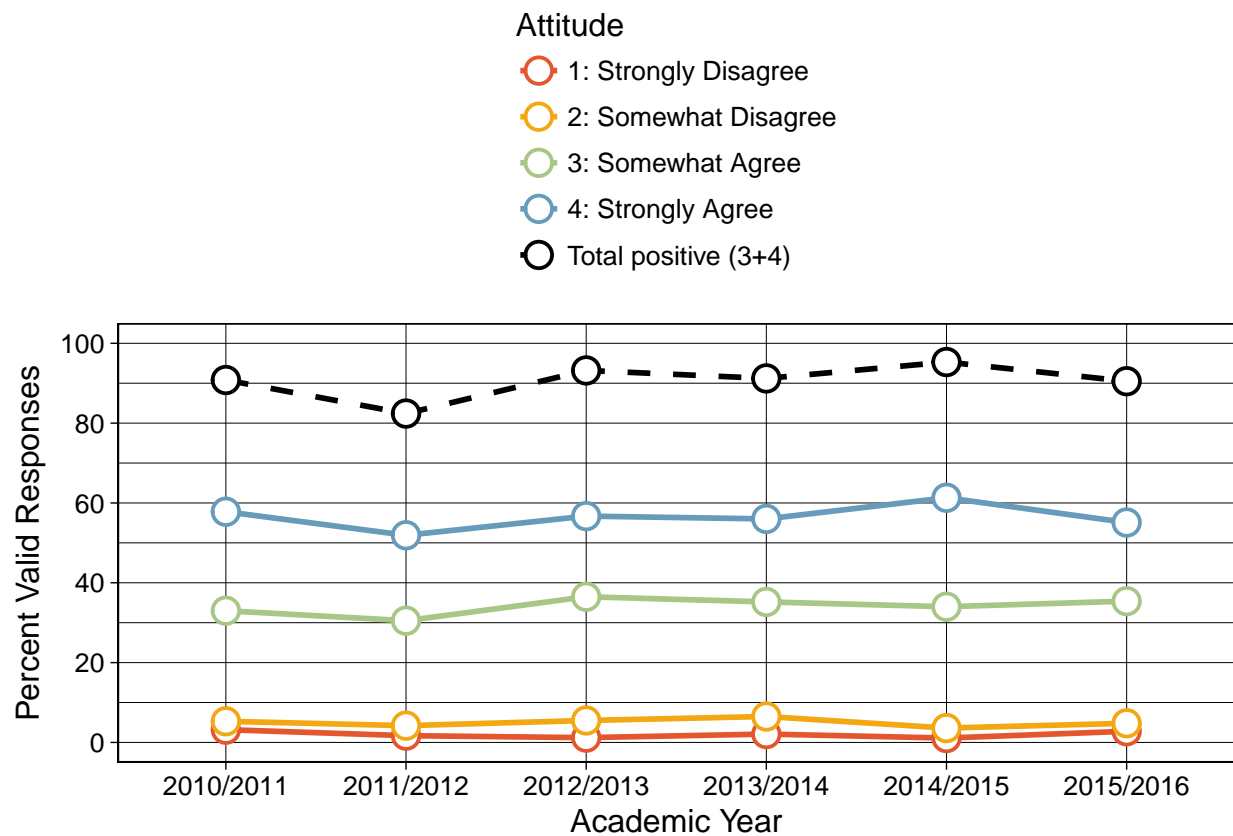Figure 3: Percent of student survey responses by academic college per academic year

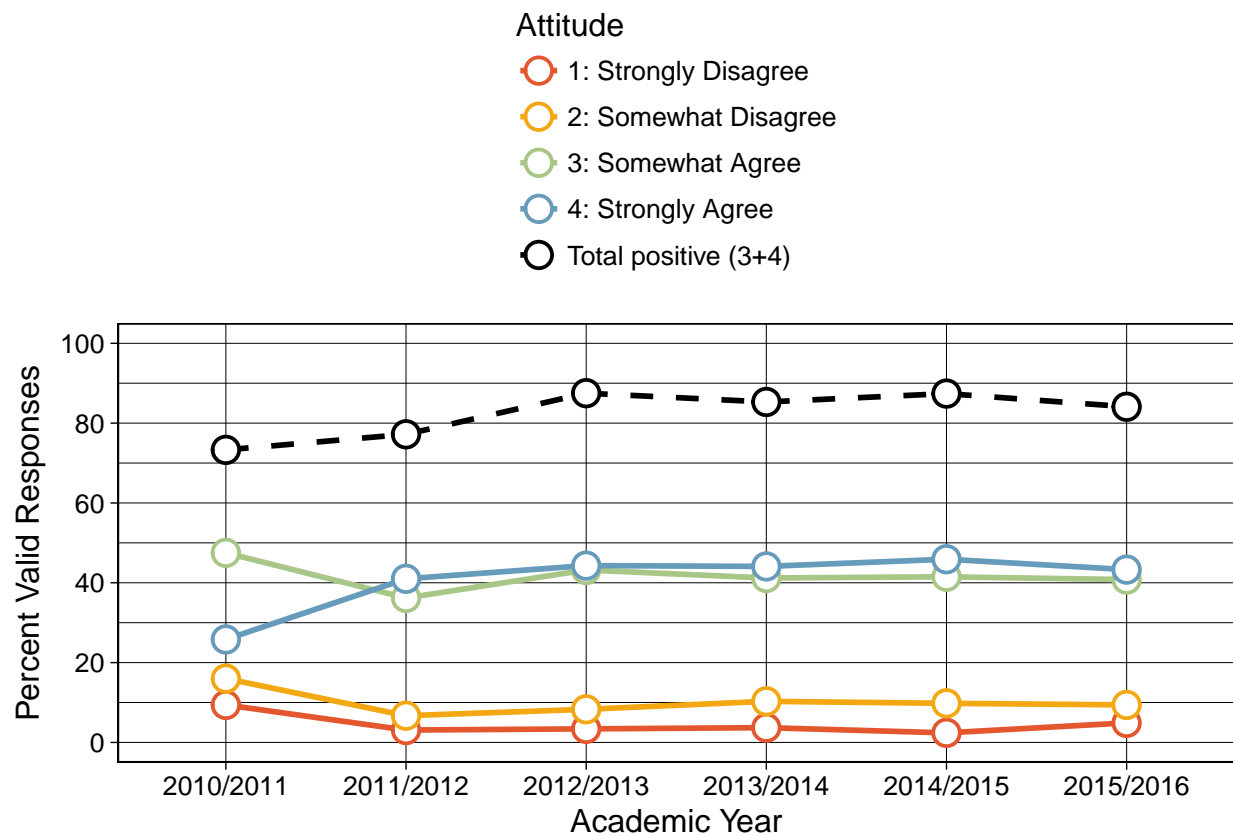Figure 4: I am satisfied with the quality of education that I received at FSU/KCAD.

Attitude

- 1: Strongly Disagree
- 2: Somewhat Disagree
- 3: Somewhat Agree
- 4: Strongly Agree
- Total positive (3+4)

Figure 5: FSU/KCAD prepared me well for employment.

**Attitude**

- 1: Strongly Disagree
- 2: Somewhat Disagree
- 3: Somewhat Agree
- 4: Strongly Agree
- Total positive (3+4)
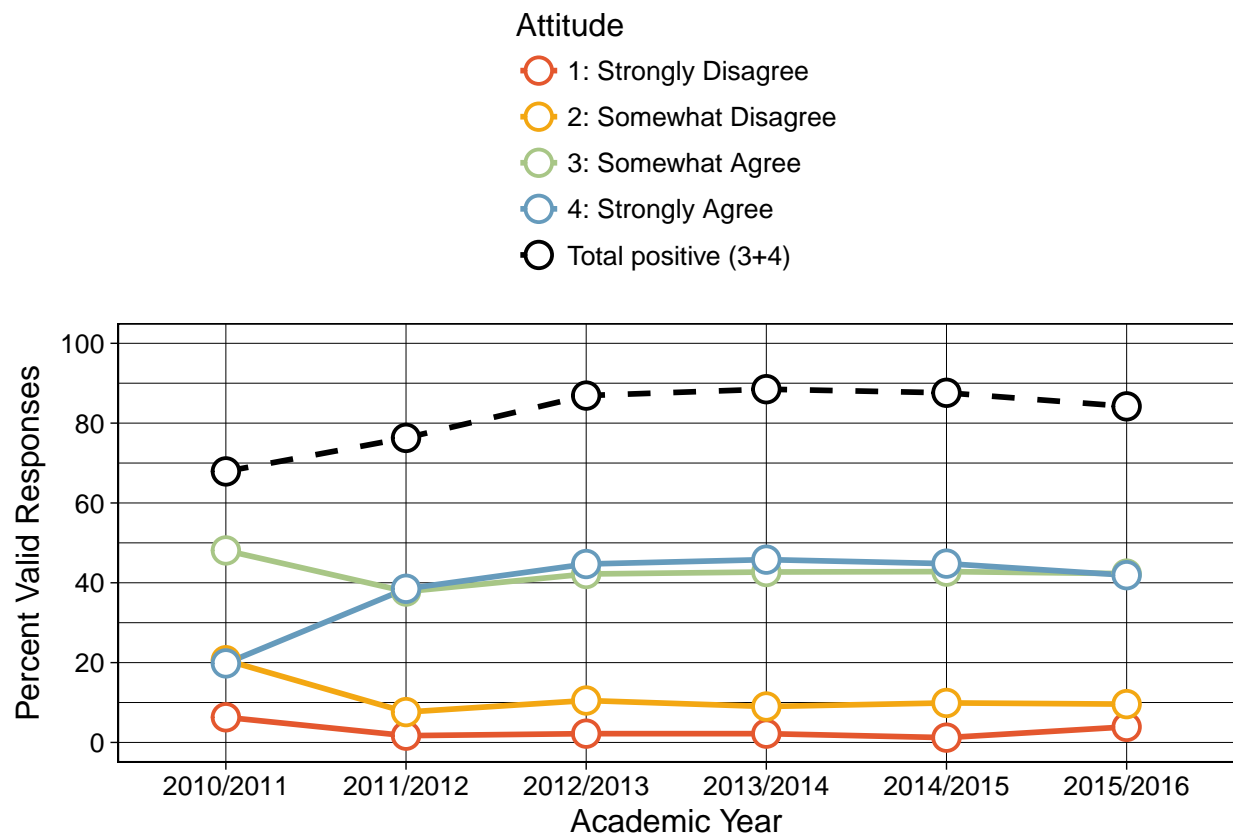
Figure 6: FSU/KCAD prepared me well for continuing my education.

Attitude

- 1: Strongly Disagree
- 2: Somewhat Disagree
- 3: Somewhat Agree
- 4: Strongly Agree
- Total positive (3+4)
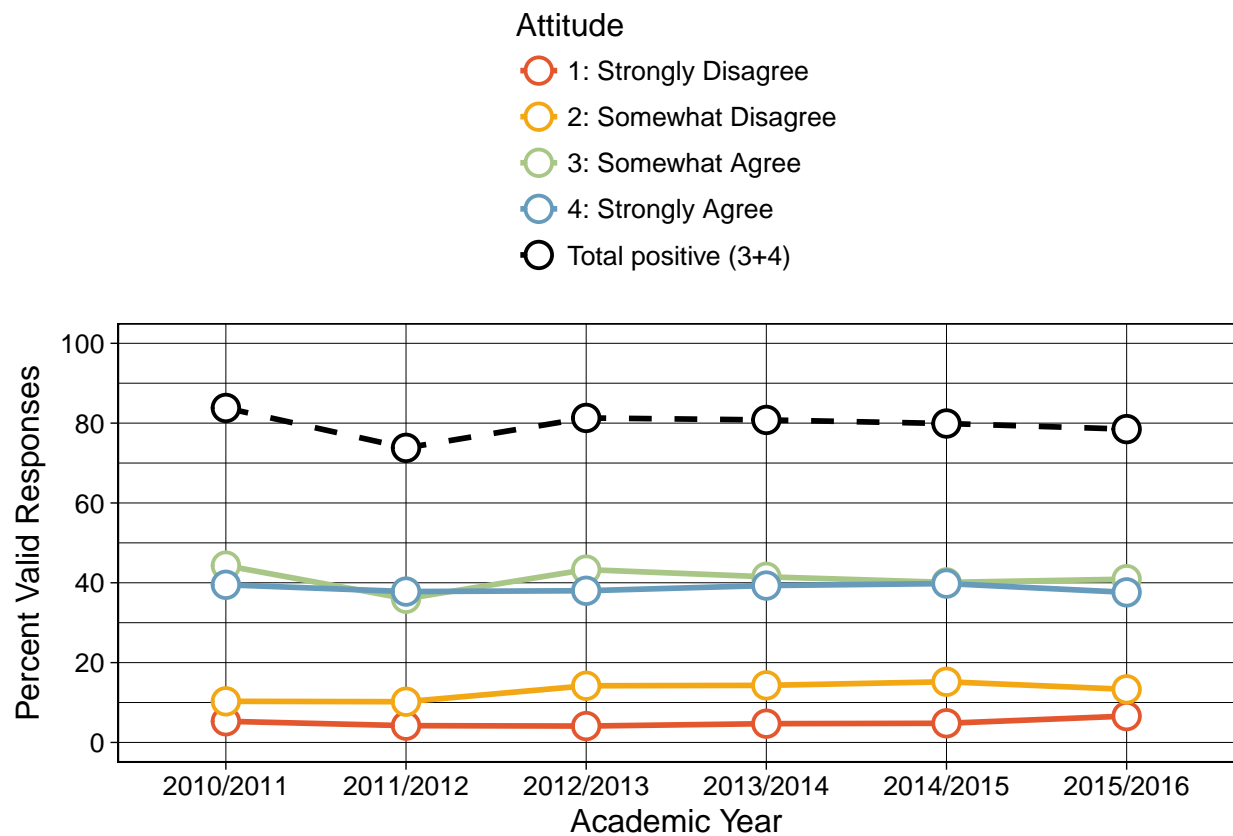
Figure 7: FSU/KCAD was a good value for my money.

Recommended
○ 1: Never
○ 2: Once or twice
○ 3: A few times
○ 4: Often
○ Total positive (3+4)
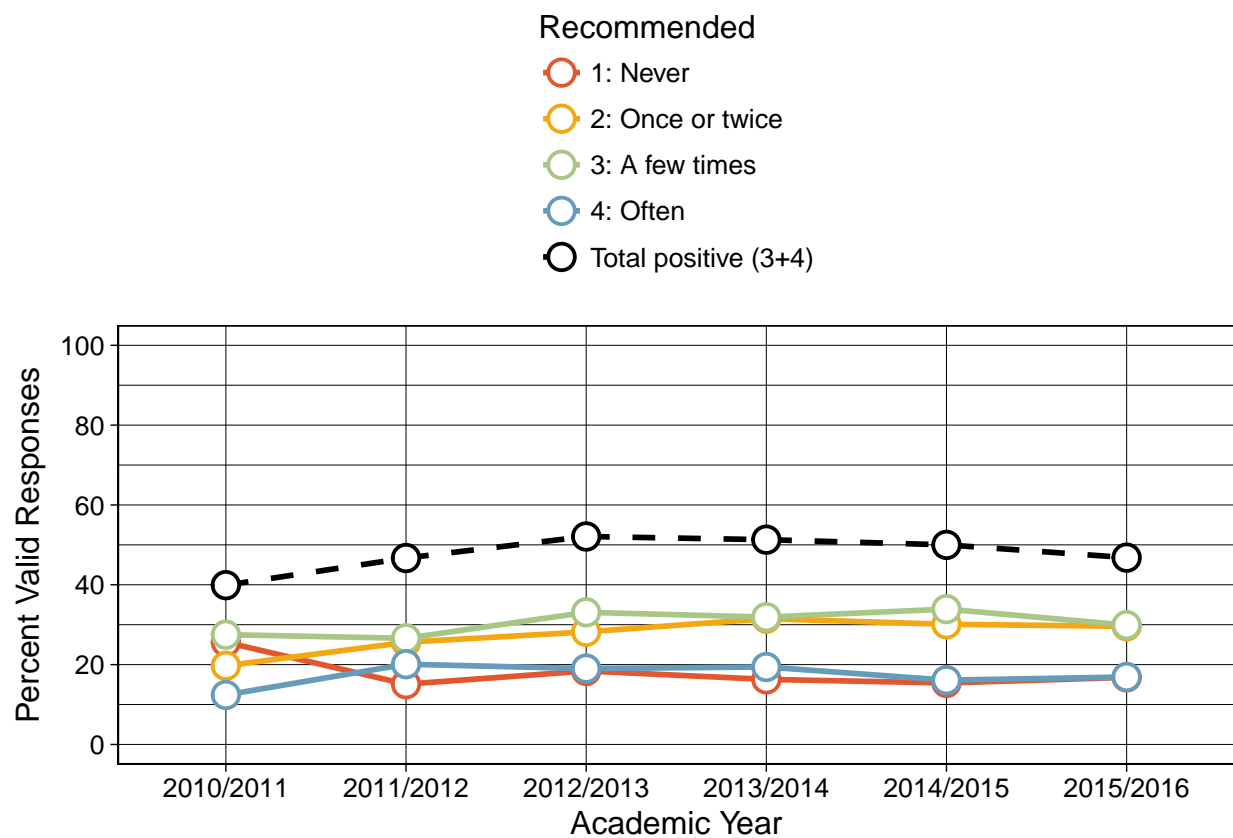
Figure 8: Since graduating, how often have you recommended FSU/KCAD to prospective students?
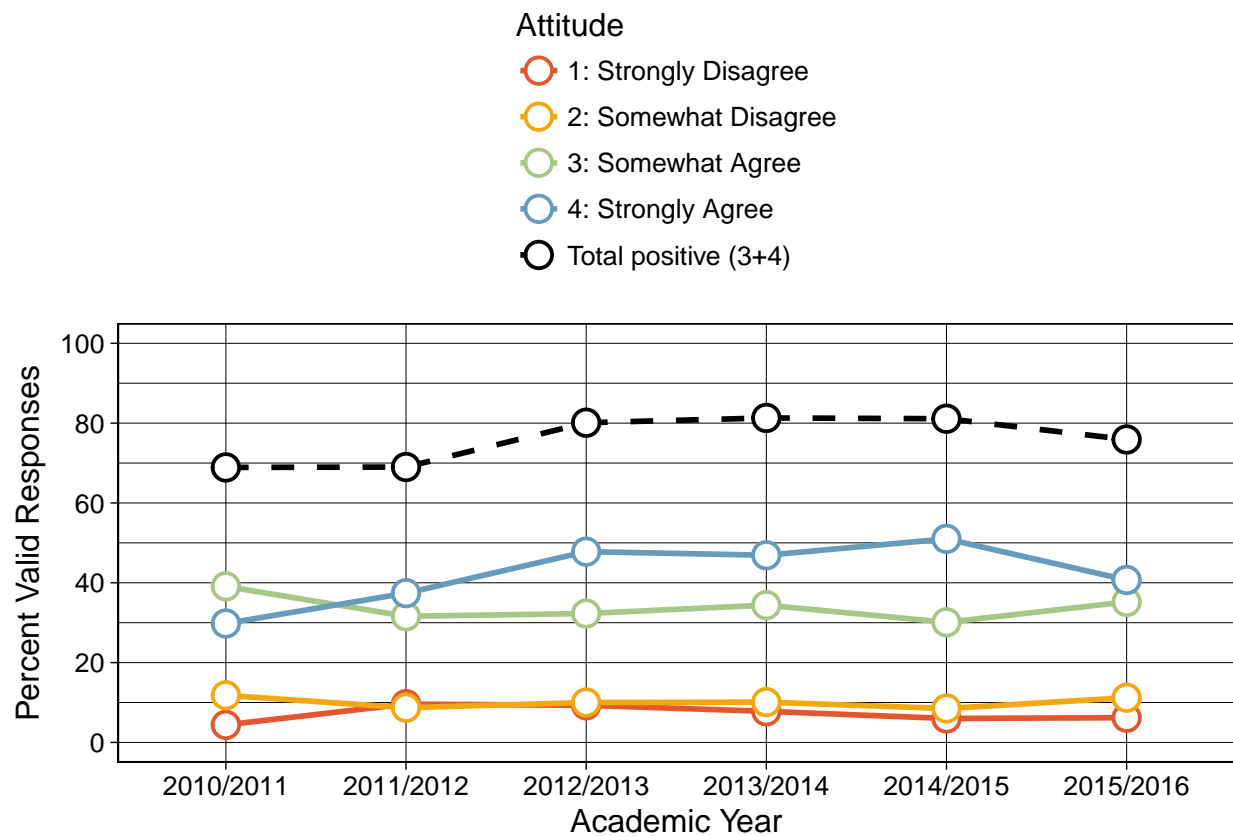
Figure 9: If I had the opportunity to start college over, I would still choose to attend FSU/KCAD.
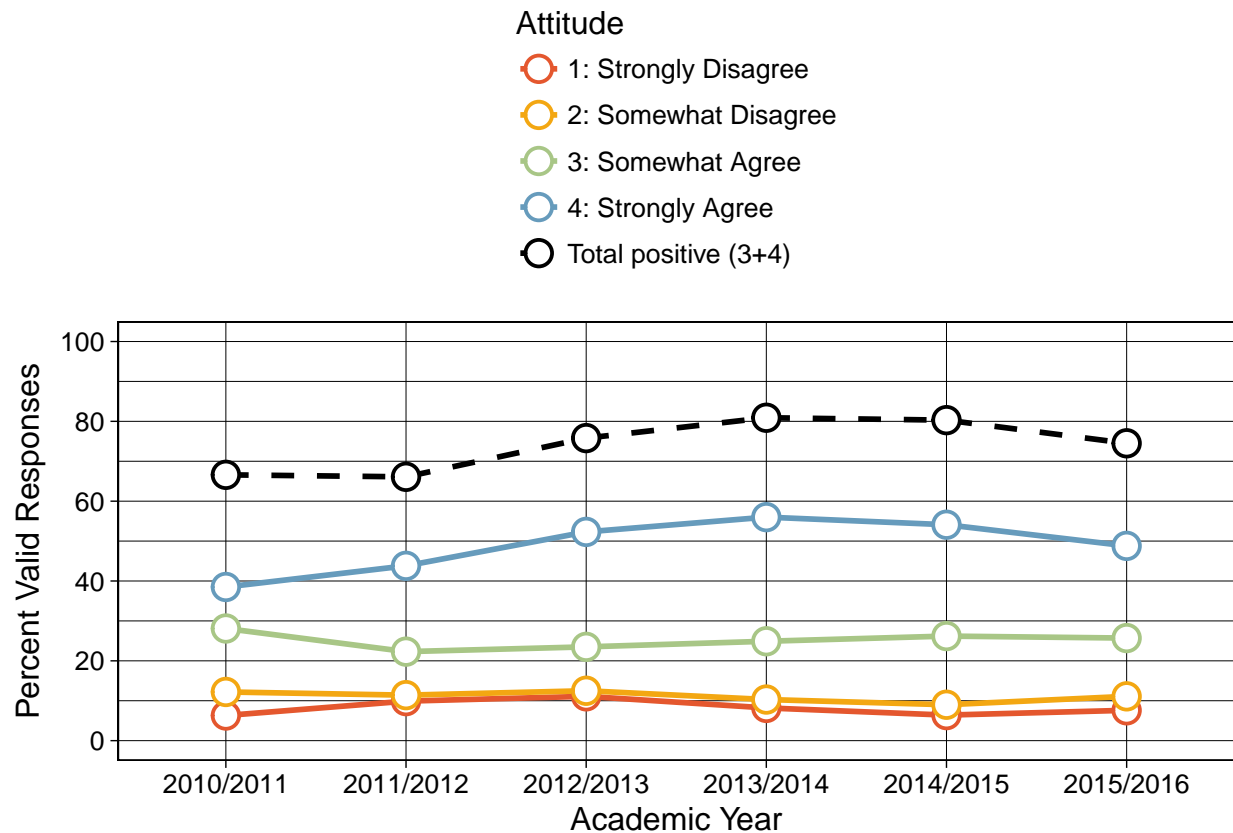
Figure 10: If I had the opportunity to start college over, I would still choose the same program of study.

Would choose the same program again

> Do you think that there are too many exams in this mix? What is the desired balance between exams, products, and performances for General Education?

# References

Buneman, P., Khanna, S., and Wang-Chiew, T. (2001). Why and Where: A Characterization of Data Provenance, pages 316–330. Springer Berlin Heidelberg, Berlin, Heidelberg.

Nosek, B. (2012). An Open, Large-Scale, Collaborative Effort to Estimate the Reproducibility of Psychological Science. Perspect. Psychol. Sci., 7(6):657–660.

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